Application No.: 10/814,681 Docket No.: 200209688-1

## **AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A heat sink comprising: one or more heat pipes connected to a base member;

a plurality of thermal plates connected to said one or more heat pipes at predefined intervals, wherein said one or more heat pipes intersects said plurality of thermal plates; and

an opening fashioned in each one of said plurality of thermal plates, wherein said opening allows airflow through said each one of said plurality of thermal plates in a direction perpendicular to said plurality of thermal plates wherein each of said openings are created having a decreasing size beginning with one of said plurality of thermal plates furthest from said base member.

- 2. (Original) The heat sink of claim 1 further comprising:
- a fan mounted in relation to said heat sink wherein said fan manipulates airflow down through each of said openings.
  - 3. (Canceled)
- 4. (Original) The heat sink of claim 1 wherein said one or more heat sinks and said plurality of thermal plates are constructed from a material having high thermal conductivity.
- 5. (Currently Amended) A method of cooling an electronic assembly comprising:

conducting heat from said electronic assembly into a plurality of heat pipes extending from a conductive plate connected to said electronic assembly;

conducting heat from said plurality of heat pipes to a set of thermal fins connected at predetermined intervals along said plurality of heat pipes; and

exchanging heat from said plurality of heat pipes and said set of thermal fins to air flowing in:

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- a direction across said set of thermal fins; and a direction through an aperture in each one of said set of thermal fins wherein said aperture for each fin is fashioned having a decreasing size.
- 6. (Canceled)

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7. (Original) The method of claim 5 further comprising: pushing air in a direction orthogonal to said set of thermal fins.

- 8. (Original) The method of claim 5 further comprising: pushing air in a direction parallel to said set of thermal fins.
- 9. (Currently Amended) A system for dissipating heat generated in an electronic assembly comprising:

means for moving heat from said electronic assembly to a plurality of conductive columns extending perpendicularly from a base plate in contact with said electronic assembly;

means for moving heat from said plurality of conductive columns to one or more thermal plates connected at predetermined distances along said plurality of conductive columns, wherein each one of said one or more thermal plates has an orifice there through, wherein said orifice is fashioned having a decreasing area for each successive plate; and

means for transferring heat from said plurality of conductive columns and said one or more thermal plates to air flowing in:

- a direction perpendicular to said one or more thermal plates; and a direction parallel to said one or more thermal plates.
- 10. (Canceled)
- 11. (Previously Presented) The system of claim 9 further comprising:
  means for fanning air in a direction perpendicular to said one or more thermal plates,
  wherein said air flows through said orifice.
  - 12. (Original) The system of claim 9 further comprising: means for fanning air in a direction parallel to said one or more thermal plates.
  - 13. (New) A heat sink comprising: one or more heat pipes connected to a base member;

a plurality of thermal plates connected to said one or more heat pipes at predefined intervals, wherein said one or more heat pipes intersects said plurality of thermal plates; and

an opening fashioned in each one of said plurality of thermal plates, wherein said opening allows airflow through said each one of said plurality of thermal plates in a

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direction perpendicular to said plurality of thermal plates comprising:

a fan mounted in relation to said heat sink wherein said fan manipulates airflow down through each of said openings.

- 14. (New) The heat sink of claim 13 wherein said one or more heat sinks and said plurality of thermal plates are constructed from a material having high thermal conductivity.
- 15. (New) A method of cooling an electronic assembly comprising: pushing air in a direction orthogonal to said set of thermal fins; conducting heat from said electronic assembly into a plurality of heat pipes extending from a conductive plate connected to said electronic assembly;

conducting heat from said plurality of heat pipes to a set of thermal fins connected at predetermined intervals along said plurality of heat pipes; and

exchanging heat from said plurality of heat pipes and said set of thermal fins to air flowing in:

- a direction across said set of thermal fins; and a direction through an aperture in each one of said set of thermal fins.
- 16. (New) A system for dissipating heat generated in an electronic assembly comprising:

means for fanning air in a direction perpendicular to said one or more thermal plates, wherein said air flows through said orifice;

means for moving heat from said electronic assembly to a plurality of conductive columns extending perpendicularly from a base plate in contact with said electronic assembly;

means for moving heat from said plurality of conductive columns to one or more thermal plates connected at predetermined distances along said plurality of conductive columns, wherein each one of said one or more thermal plates has an orifice there through; and

means for transferring heat from said plurality of conductive columns and said one or more thermal plates to air flowing in:

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a direction perpendicular to said one or more thermal plates; and a direction parallel to said one or more thermal plates.